DOCUMENT RESUME

ED 157 374 FL 009 445

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TITLE Can Researchers Find True Happiness in a Public School Setting? A Success Story in Bilingual Education Evaluation.
INSTITUTION Austin Independent School District, Tex. Office of Research and Evaluation.
PUB DATE Mar 78
NOTE 23p.; Paper presented at the annual meeting of the American Educational Research Association (Washington, D. C., March, 1978); Three pages of tabulated test results are not included due to small type size; other tables may be difficult to read.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Bilingual Education; Bilingualism; Bilingual Schools; Bilingual Students; Bilingual Teachers; *Curriculum Evaluation; Curriculum Research; Elementary Education; Elementary School Students; English (Second Language); *Evaluation Methods; Experiential Learning; *Experimental Curriculum; Field Trips; Language Instruction; Language Programs; *Program Evaluation; Public Schools; *Research Design; Research Projects; Second Language Learning; Spanish; Teaching Skills

ABSTRACT

A two-year evaluation of an experience-based curriculum in bilingual education is described in parable style. The proposal for this research design was developed around the question of first-hand field experiences. A review of the first-year project revealed some of its weaknesses and reasons for poor results. For the second year, the public school constraints were taken into consideration, a training session for school personnel was conducted, and a research design was planned by all staff and researchers to be involved in it. The design was fairly complex because of the public school constraint that no child ever be denied the "benefits" of a program. Two consecutive grade levels at each school were assigned randomly to each of three treatment groups called full, partial and delayed treatment. Results indicated that students in the full treatment group performed better than students in the partial treatment group, who in turn performed better than those in the delayed treatment group. Advantages were evident in both Spanish and English communication skills. Appendices cover teacher competencies in a bilingual program; parental involvement strategies; and description, analysis and results of the experience-based curriculum project. (AMH)

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CAN RESEARCHERS FIND TRUE HAPPINESS IN A PUBLIC SCHOOL SETTING? A SUCCESS STORY IN BILINGUAL EDUCATION EVALUATION

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A B S T R A C T

After several attempts at intituting research designs in the public school setting, the authors have found that given a certain set of ingredients including a U.S. Office of Education mandate and a training program for school and project staff one effort has succeeded. This effort was the investigation of a field-trip based curriculum for bilingual education. The design still had to meet public school constraints that led to a fairly complex design which is described in detail. However, the project ended the 1976-77 school year with a success.

The narrative of the paper is written in the style of a parable with more technical appendices attached.

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CAN RESEARCHERS FIND TRUE HAPPINESS IN A PUBLIC SCHOOL SETTING?
A SUCCESS STORY IN BILINGUAL EDUCATION EVALUATION

O V E R V I E W

Previous work by one of the authors has pointed out the difficulty of pursuing research in the public school evaluation setting.[1] In the 1975-76 school year at the behest of the U.S. Office of Education, the Austin Office of Research and Evaluation again attempted to institute a research design on a last minute basis in a Title VII bilingual program with equally disastrous effects. Teachers and staff rebelled, the treatment was abysmally implemented, and the effects were predictable. However, a U.S. Office of Education mandate had served as an opportunity that we did not waste. We had begun staff development on the whys and hows of research in an all out fashion almost immediately upon program implementation and prior to the development of a new proposal for the 1976-77 school year. We designed a "one-hour course" with transparencies giving the minimum basics of research design. This served to instruct participants on why our design required certain program characteristics and imposed certain program constraints. This workshop was presented to program staff, administrators, and principals involved first. This was then followed up with a meeting with the teachers and other staff at each school involved in that program. A sell-job on the benefits of research design was also included. But most importantly teachers and staff were invited to first nominate and then elect a research topic they considered essential to bilingual education.

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1 Ann Lee and Freda Holley. An Ideal Evaluation Design in a Public School Setting, Or Where Are You Campbell and Stanley Now that We Need You? Paper presented at the Annual Meeting of the American Educational Research Association in Washington, D.C., April 1975.

Finally, the topic of field trip experiences emerged as their preferred topic. Teachers felt field trips provided important experiences for their students, but the question often arose, "Do they really enhance student learning?" The question was further elaborated. "Do field trips alone produce learning gains as well as a field trip experience carried out with a curriculum based on that experience?" The proposal for the 1976-77 school year was developed around these questions. Coincident, of course, were to be questions on the quality and use of the developed curriculum materials. Since in general specific materials for bilingual instruction of dialect-specific groups are lacking, the materials themselves were most important to the overall program design.

A strong motivator for good implementation of this new design developed when the evaluation report for the first school year, 1975-76, came in. The report was so negative, reporting in fact only minimal implementation and no positive results, that school board, community, schools, and administrative staff were spun into an uproar. Initial reaction, of course, was to criticize the evaluation, but when the dust settled, the staff and schools were strongly feeling the pressures of accountability. They became more united and went into the 1976-77 program with an aggressive attitude toward succeeding.

This paper will report on the project's improvements in implementation for 1975-76 and the result outcomes. Process evaluation from 1976-77 indicated that there was a treatment which did produce effects. The design was a fairly complex one necessitated by the public school constraint that no child ever be denied "the benefits" of a program. This experimental design will be described in detail. Some continuing illustration of the public school evaluator's dilemmas in not being in command of the treatment will also be illustrated in a second aspect of the program, parental involvement.

CAN RESEARCHERS FIND TRUE HAPPINESS IN A PUBLIC SCHOOL SETTING? A SUCCESS STORY IN BILINGUAL EDUCATION EVALUATION

A paper presented at the annual meeting of the
American Educational Research Association

March, 1978

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Austin Independent School District
Austin, Texas

Publication Number: 77.36

Printed in USA

CAN RESEARCHERS FIND TRUE HAPPINESS IN A PUBLIC SCHOOL SETTING? A SUCCESS STORY IN BILINGUAL EDUCATION EVALUATION

Is productive research possible in a public school setting? Can the natural conflict between service oriented school personnel and research oriented evaluators be resolved? The ESEA Title VII Bilingual Program in Austin, Texas has encountered both failures and successes in this area. Their experiences are presented here to illustrate that it is possible to design research around the constraints encountered in the public schools.

The narrative of this paper is written as a parable; however, the events represented here are based on actual happenings. Appendices are attached to provide the reader with definitions of the true variables and descriptions of the results obtained.

Long before humans learned to speak, there lived a tribe of people who communicated exclusively by manipulating the fingers on their right hand. Because of this, everything in their society was designed to be worked using the right hand. The schools were right-handed, and the jobs available for graduates were right-handed. Justice in this country of Derecha, though even-handed, was on the side of the right for that was their manifest destiny.

As one might expect, everything was too good to be true, for the country to the south, Izquierda, was a left-handed country. Eventually, Izquierdans began moving into Derecha and joining other Izquierdans who had lived in the south of Derecha since it had been taken over from Izquierda generations before.

No longer could Derecha just ignore the left-handed communicators among them. The children of these native left-handers frequently fell behind their right-handed classmates in school. For years anyone communicating from the left had his hand slapped. The Izquierdan-Derechans right-handed communications were definitely affected by their left-dominant background. Their fingers slanted to the left even when communicating

with their right hand. Derechans complained that Izquierdans moved the fingers of their left hand so fast that they could not even understand the few words they knew from the left.

Eventually, the growing number of the left-handed communicators and their right-handed sympathizers who could see both sides of the issue mustered enough political power to pass new laws to aid the education of *children who are of limited right-hand communication ability as a result of coming from a family background whose dominant hand is left.* These laws provided not only new and exciting jargon, such as, mono-mano for only knowing how to communicate with one hand and bi-mano for knowing how to communicate with both hands, but also great sums of money to fund new educational programs.

Even though the grants were being awarded hand-over-fist, the left-handed children were not learning to use their right hands very fast. So, the lawmakers issued a mandate to all bi-mano education projects that they were to become demonstration projects and not service projects. In order to receive a hand-out for bi-mano education, a project must hire a seeker of truth (or contract out the truth seeking to a reputable firm) and perform the dreaded ritual of truth seeking.

The manualists (teachers) and managers (principals) knew what this meant. No longer could they receive great sums of money and serve everyone in their schools. They now had to give some students special materials and services and deny these to the poor students who would fall into the often fatal control group.

The conflict had begun. On the one hand, there were the manualists wanting only to care for all the students without the bother of following a truth-seeking design. On the other hand, there were the truth-seekers

who were determined to implement clean designs with random assignment in the beginning rather than random results in the end. Was a solution even possible?

The truth-seekers were clever enough to pick up on some of the manualists' concerns, especially the one about serving some students and not serving others. So the first truth-seeking design tried was one in which two different treatments were compared to each other rather than having a treatment group and a deprived control group. In addition, the truth-seekers schemed to avoid some fist waving by focusing the treatments on the manualists and the children's parents rather than directly on the children. After all, in Derecha a truth-seeker should not only manipulate the variables but also vary the manipulators. That way everyday manipulations in the classrooms would be affected only indirectly. Foolish those truth-seekers were! This backhanded approach was too thinly gloved to slip by unnoticed.

However, the first year truth-seeking designs were finalized in a great meeting between the truth-seekers and what must have seemed to them to be the rest of the world (manualists, managers, and other administrators). The school personnel agreed to two truth-seeking designs, one for manulists and one for parents, even though they were overwhelmed by all the truth-seekers' technical terms. Even the promise of fantastic analyses using the latest digital computers sounded sinister to them.

Figure 1 outlines the truth-seeking design for the manualists. Two exercise programs to aid their classroom manipulations were planned. One program was to train manualists individually using the results of a Manualist Competency Test (MCT) to identify training needs. The other

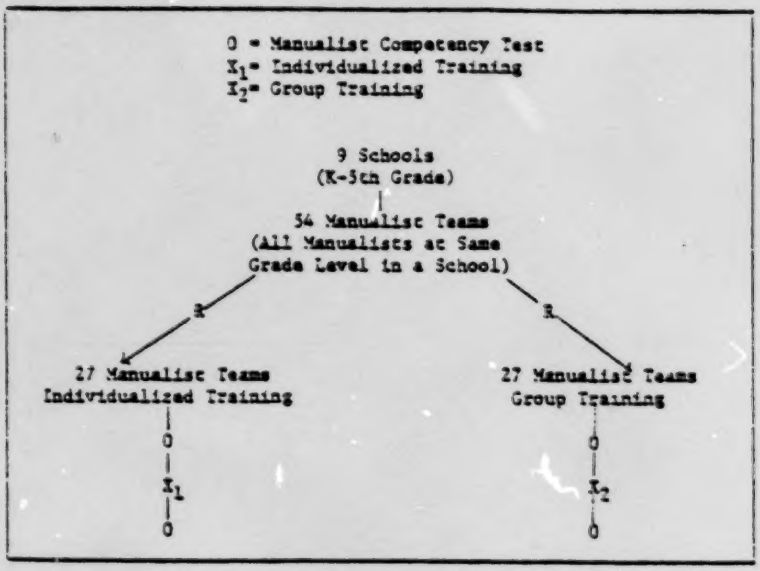

Figure 1. TRUTH-SEEKING DESIGN - YEAR 1

program was to train manualists more traditionally in large groups using the results of the MCT to identify the most evident group needs. In the end, the exercise program that had the more positive effect on manualists' skills with both the right and the left hand would be determined.

Figure 2 shows the truth-seeking design used with parents. The Bi-Mano Project had hired a community handmaiden to work with each school. These handmaidens were to work with one third of the parents individually, one third in groups at the school, and one third in no special way. The amount of participation in school activities, the parents' attitudes toward school, and the parents' knowledge of school activities were all to be measured carefully by the truth-seekers.

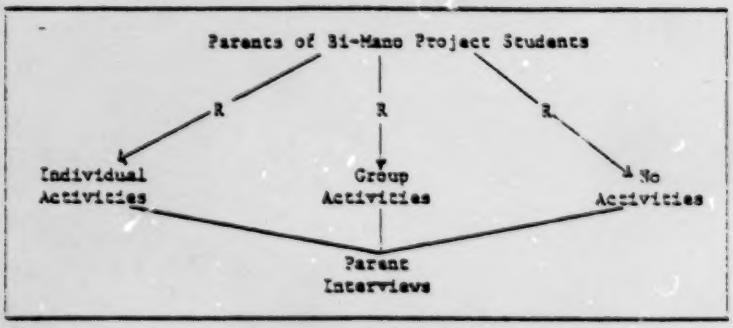

Figure 2. TRUTH-SEEKING DESIGN FOR PARENTS

The school year could best be described as tumultuous. The managers and manualists resented having truth-seekers scrutinize their every movement when the regular mono-mano school manipulations were never besought for so much information with which to be called up for the dreaded ritual of accountability. When the school board performed that ritual on the Bi-Mano Program, everyone threw up his hands in resignation (emotional not political). The seekers reported that the individualized and group exercise programs had looked so identical to them that they could not tell them apart. There were no differences between the two treatments; however, manualists in both had become significantly more nimble as measured by the MCT. Since no differences were found between the treatments the relative effects of the two were not investigated for student outcomes.

The parent design proved to be equally unproductive. The handmaidens held very few individual or group training sessions. In these sessions, the main activities were handicrafts rather than information dissemination. The few parents with which they worked were sampled and interviewed by assistant truth-seekers, no real differences were found between parents who were individually and parents who were group contacted.

What a disaster. The school people were upset, the school board members were disappointed, the truth-seekers were frustrated, the executors of the government money were casting wary eyes, the left-handed dominant students were no better off, and the Izquierdan-Derechans still could not shout "hoorav for our side."

The truth-seekers knew something drastic had to be done and quickly. Analyzing the situation, they identified the constraints that were handcuffing their efforts.

No student could be denied a treatment even though that treatment's benefits may be untested. By the end of the year, every student should have received the same "benefits."

Schools were too different and too few (nine) to be randomly assigned to treatment groups without risking having non-equivalent groups.

School personnel did not want to be split up into groups, but if they must be, they wanted to keep at least two consecutive grades in the same groups, e.g., K-1, 2-3, 4-5.

The treatment selected had to be acceptable to the manualists, preferably hand-picked by them.

The school personnel had to be taught the necessity of following a proper truth-seeking design to confidently test a hypothesis. Terms, such as, random, significant, comparison/control group, etc., must be understood.

With these in mind, the truth-seekers plotted, and a plan was devised by which school personnel would be led by the hand through a training minicourse in truth-seeking designs, a brainstorming session, and a decision making session to develop an acceptable design. The steps followed were...

Luncheon at an Izquierdan restaurant with top administrators and managers to present a 30 minute minicourse on truth-seeking.

a. Random assignment
b. Probability
c. Significance
d. Control groups/alternate treatments
e. Common designs (many years later published by Campbell and Stanley)

Brainstorming with the administrators and managers all the questions to which they would like to see answers sought.

Repeating and for the manualists.

Preparing several possible designs from which a bi-mano education task force could choose the one which was most important and most closely fit their constraints.

Finalizing the design with the task force and submitting it to the government executors for approval.

The result was the handsome truth-seeking design presented in Figure 3. The task force chose first-hand field experiences as their area of greatest interest. The questions posed were:

> What are the effects of activity-oriented, experience-based learning experiences on a left-hand dominant child's manipulative skills?
>
> What are the effects of activity-oriented, experience-based learning experiences conducted by a trained manualist using prepared exercises as compared to those conducted by an untrained manualist without prepared units?

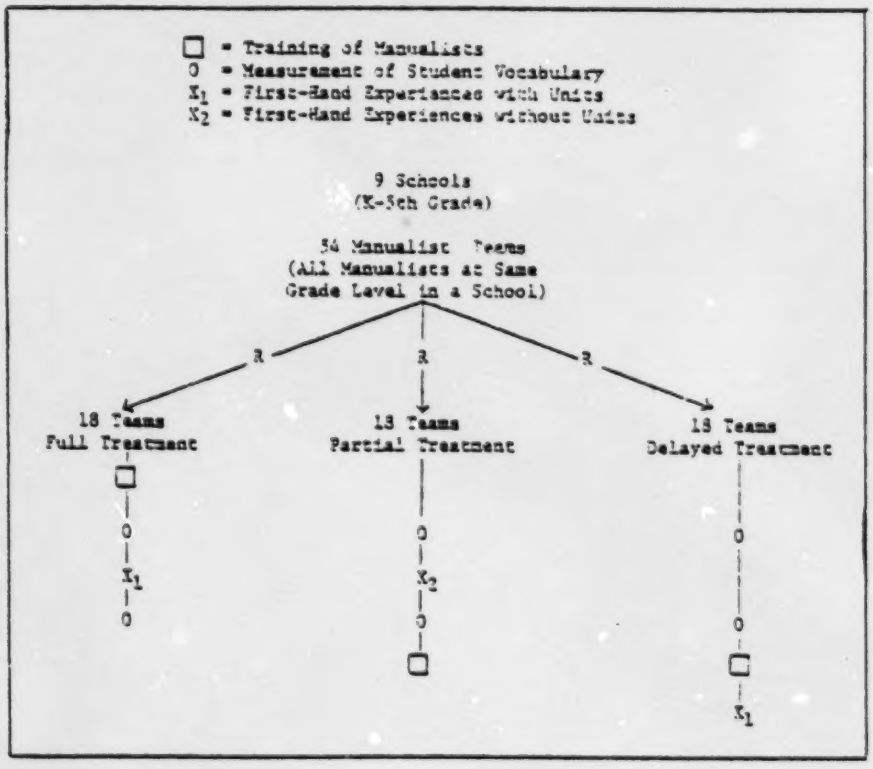

Figure 3. TRUTH-SEEKING DESIGN - YEAR 2

The key characteristic of the design was that all students would be allowed to participate in the field experiences before the end of the year. Two consecutive grade levels at each school were assigned randomly to each of three treatment groups.

> Full Treatment. Manualists were trained, units were provided, and field experiences were conducted prior to posttesting (five moons after the start of the school year).
>
> Partial Treatment. Manualists were not trained, units were not provided, but field experiences were taken prior to posttesting.

Delayed Treatment. Manualists were trained, units were provided, and field experiences were taken after post-testing.

A domain-referenced test was developed around the manipulations (both left-handed and right-handed) which the students would encounter during their field experiences.

The major handicap of this design was that no long-term effects could be measured since, by the end of the school year, all students would have received similar treatment.

The design for parents was left unchanged for this second year. Unsurprisingly, no significant differences were observed the second year either. Implementation levels had been about the same, very low, both years.

On the other hand, however, the results from the experience-based activities were both statistically and educationally significant. The students in the full treatment consistently outperformed students in the partial treatment group. The students in the partial treatment group outperformed the students in the delayed treatment group at one of three levels. The advantages were evident in both left- and right-handed communication skills. The treatment had won hands down.

Everyone was happy. The manualists had successfully taught their students the desired skills, and the truth-seekers had successfully implemented a rather complex design within the constraints of the public school setting.

All that is left is the moral of our story.

A seeker of truth can find happiness in a public school setting if the constraints of the situation are considered and accepted beforehand. Truth-seeking and education can go hand-in-hand, sometimes.

ATTACHMENT 1

ASSESSING COMPETENCIES REQUIRED
FOR TEACHING IN A BILINGUAL
PROGRAM
1975-1976

The MCT referred to in Figure 1 represents the Teacher Competency Test (TCT) used to measure teacher acquisition of knowledge from inservice training sessions conducted by the ESEA Title VII Bilingual Project. Only knowledge competencies were assessed with this paper and pencil instrument.

Because actual differences between the two treatments were small, no comparisons were made of the two. However, pre to post changes were measured and are reported here in Figure 1-1. As is evident from inspecting the data, the general direction of change for the individual competency areas was positive. Overall, the teachers did demonstrate significant gains in competency, probably as a result of the inservice training provided by the Title VII Bilingual Project.

Figure 1 in the narrative is an accurate depiction of the assignment of teachers by grade level teams within schools to the two treatment groups defined below.

Model I - Teachers were administered the TCT; individual profiles were provided to each and to the Title VII staff to be used in planning and conducting individual training activities.

Model II- Teachers were administered the TCT; group profiles were provided to each and to the Title VII staff to be used in planning and conducting group training activities.

Comparison of Pre and Post Teacher Competency Test Scores
for Model I and Model II Teachers

Number of Model I Teachers = 57
Number of Model II Teachers = 58
Scoring Procedure: Area of Strength = 2 points
Area for Reinforcement = 1 point
Area for Improvement = 0 point

	COMPETENCY	Treatment	Pretest Mean	Posttest Mean	Direction Of change	Probability Pre and Post are the same
1.	Spanish Reading Comprehension - Simple	Model I	1.54	1.77	+	.0058
		Model II	1.74	1.69	-	.5601
2.	Spanish Reading Comprehension - Intermediate	Model I	1.07	1.39	+	.0018
		Model II	1.29	1.26	-	.7102
3.	Second Language Instruction	Model I	1.44	1.53	+	.3229
		Model II	1.55	1.72	+	.0733
4.	IRI - Purpose and Scope	Model I	.98	1.19	+	.0207
		Model II	1.14	1.19	+	.6222
5.	English/Spanish Interface Phonemes	Model I	1.10	1.39	+	.0066
		Model II	1.24	1.40	+	.1984
6.	Teaching - Writing - Childs Second Language	Model I	1.09	1.17	+	.4339
		Model II	1.17	1.12	-	.6629
7.	Use of a Bilingual Aide	Model I	1.77	1.82	+	.4785
		Model II	1.72	1.74	+	.8313
8.	Use of the Community Representative	Model I	1.03	1.10	+	.4610
		Model II	1.02	1.22	+	.0991
9.	Awareness of culture - Mexican-American	Model I	1.21	1.33	+	.1599
		Model II	1.31	1.41	+	.3162
10.	Assignment of Student to Reading Program	Model I	.89	.86	-	.7532
		Model II	1.14	1.10	-	.7879
11.	Communications with Title VII Staff	Model I	.77	.93	+	.0796
		Model II	.84	.86	+	.8689
12.	AISD Philosophy of Bilingual Education	Model I	1.03	1.23	+	.0744
		Model II	1.10	1.29	+	.0821
13.	Raising Reading Comprehension Levels	Model I	1.53	1.72	+	.0193
		Model II	1.72	1.79	+	.4243
14.	Classroom - Time Management	Model I	1.44	1.56	+	.1051
		Model II	1.41	1.52	+	.1056
15.	IRI Scoring/Recording Errors	Model I	1.26	1.24	-	.8313
		Model II	1.17	1.19	+	.8435
16.	Time to Begin Second Language Reading	Model I	1.56	1.63	+	.3526
		Model II	1.65	1.71	+	.6009
17.	Second Language Acquisition Process	Model I	1.51	1.58	+	.4031
		Model II	1.64	1.71	+	.3792
18.	Components of AISD Title VII	Model I	1.75	1.81	+	.4785
		Model II	1.83	1.90	+	.3792
19.	OE Definition of A Bilingual Program	Model I	1.61	1.71	+	.1000
		Model II	1.60	1.52	-	.0800
20.	Tests and Measurement	Model I	1.72	1.82	+	.1556
		Model II	1.67	1.77	+	.2008
21.	Use of Norm and Criterion Tests	Model I	1.49	1.54	+	.5752
		Model II	1.46	1.55	+	.3603
22.	Purpose of Evaluation for Title VII	Model I	1.53	1.63	+	.2594
		Model II	1.72	1.59	-	.1688
23.	AISD Evaluation Model	Model I	1.53	.88	-	.0000
		Model II	1.43	.84	-	.0000
	Total Score (out of a possible 46 points)	Model I	29.35	34.26	+	.0000
		Model II	31.27	34.53	+	.0001
	Total Number of Individual Items Correctly Answered	Model I	50.54	54.12	+	.0003
		Model II	52.55	54.72	+	.0226

Figure 1-1. COMPARISON OF PRE AND POST TEACHER COMPETENCY TEST FOR MODEL I AND MODEL II TEACHERS.

ATTACHMENT 2

PARENTAL INVOLVEMENT STRATEGIES
1975-1976

The parent research design referred to in Figure 2 is an accurate depiction of the assignment of parents of ESEA Title VII Bilingual Project students to treatment groups. The community representatives hired by the project were to have worked with the parents in the manner described below; however, very few individual and group activities were conducted.

Model 1 - Parents were to be contacted and trained individually by the community representatives.

Model 2 - Parents were to be contacted and trained in groups by the community representatives.

Model 3 - Parents were not to be contacted by the community representatives.

The dependent variables measured to determine the effects of the three treatments were (1) parent attitudes toward and knowledge of school activities and (2) parent participation in school activities.

Figure 2-1 shows the responses of parents to the fifteen items on the interview form. An analysis of variance among the groups of parents interviewed showed very few significant differences and no stable trend favoring one group over the others. The treatments seemed to have equivalent effect (or lack of effect) upon parental attitudes and knowledge levels.

Figure 2-2 shows the number of times a parent from each of the three treatments participated in a school activity during the year. A Chi Square analysis revealed a significant difference among the total number of visits for the three groups. The parents in Model 3, no contact or training, actually participated less frequently. This could mean that contact between a community representative and a parent can produce more frequent parent participation in school activities. Since no differences were observed between the parents who were individually contacted and those who were group contacted, a bilingual project might opt to bypass the more expensive and time-consuming individual contact in favor of the more efficient group contact activities.

Item	Mean Responses			Probability all groups are equal
	Group 1	Group 2	Group 3	
0= Incorrect 1= Correct				
1. What is _____'s teacher's name?	.9259	.9167	.9130	.9965
2. What is _____'s teacher aide's name?	.2593	.5833	.2174	.0131
3. What is _____'s principal's name?	.7037	.8333	.7391	.5603
1= Never 3= Sometimes 2= Seldom 4= Often				
4. Do you check to see if _____ has any homework and make sure that he/she does it?	3.6923	3.5455	3.6364	.3235
5. How often do you discuss _____'s school work with him/her?	3.5769	3.7826	3.4545	.3122
6. Do you discuss with other parents the things happenning at _____'s school?	2.3846	3.0417	2.2174	.0351
1= Just when asked 2= Whenever they want to				
7. How many times have you visited _____'s school since August,1975? - Mother	6.4444	9.0000	4.0000	.1331
8. How many times have you visited _____'s school since August,1975? - Father	2.4545	2.0000	.8182	.1784
9. Do you think parents should visit their childrens school whenever they want to or just when asked to come by the principal, counselor, or teacher?	1.8889	1.9167	1.9565	.3905
1= Never 3= Most of the time 2= Sometimes 4= Always				
10. Do you discuss _____'s report card with him/her?	3.8800	3.3652	3.7273	.1789
11. Do you read the letters and notices sent home by _____'s school?	3.8519	3.9565	3.9130	.4642
1= No 2= Yes				
12. Do you think that letters and notices sent home by _____'s school should be in both English and Spanish?	1.9600	2.0000	1.9130	.3519
1= Not at all 3= Some 2= Very little 4= Very much				
13. How well do you feel you understand Bilingual Education?	3.1111	3.1250	3.1818	.9496
14. How much do you approve of Bilingual Education for _____?	3.7778	3.8333	3.7826	.9281
1= No 2= Yes				
15. Prior to today, has _____'s school informed you about the Bilingual program and what is doing?	1.8462	1.6957	1.7273	.4395

Group 1 = Students whose parents were actually visited and/or contacted personally by the Community Representative.
Group 2 = Students whose parents actually attended a group meeting and were contacted only by written notices.
Group 3 = Students whose parents were not contacted by the Community Representative.
Group 4 = Students randomly selected from Model I.
Group 5 = Students randomly selected from Model II.
Group 6 = Students randomly selected from Model III.

Figure 2-1. COMPARISON OF TREATMENT GROUP RESPONSES.
(Page 1 of 3)

Item	Mean Responses			Probability all groups are equal
	Group 4	Group 5	Group 6	
0= Incorrect 1= Correct				
1. What is _____'s teacher's name?	.9130	.8571	1.0000	.1371
2. What is _____'s teacher aide's name?	.2609	.3929	.3333	.6252
3. What is _____'s principal's name?	.8696	.7500	.8519	.4868
1= Never 3= Sometimes				
2= Seldom 4= Often				
4. Do you check to see if _____ has any homework and make sure that he/she does it?	3.6364	3.2400	3.7600	.0781
5. How often do you discuss _____'s school work with him/her?	3.7600	3.6429	3.8148	.4996
6. Do you discuss with other parents the things happenning at _____'s school?	2.4000	2.6923	2.5357	.6332
1= Just when asked 2= Whenever they want to				
7. How many times have you visited _____'s school since August,1975? - Mother	3.7895	3.2105	4.0526	.4105
8. How many times have you visited _____'s school since August,1975? - Father	.9231	1.5000	2.4167	.3129
9. Do you think parents should visit their childrens school whenever they want to or just when asked to come by the principal, counselor, or teacher?	1.8400	1.8889	1.9643	.3218
1= Never 3= Most of the time				
2= Sometimes 4= Always				
10. Do you discuss _____'s report card with him/her?	3.7391	3.3600	3.8846	.0282
11. Do you read the letters and notices sent home by _____'s school?	3.7600	3.7857	3.8929	.4786
1= No 2= Yes				
12. Do you think that letters and notices sent home by _____'s school should be in both English and Spanish?	2.0000	1.9286	1.3929	.2609
1= Not at all 3= Some				
2= Very little 4= Very much				
13. How well do you feel you understand Bilingual Education?	3.0800	3.1111	3.0714	.9842
14. How much do you approve of Bilingual Education for _____?	3.8333	3.7857	3.8571	.7844
1= No 2= Yes				
15. Prior to today, has_____'s school informed you about the Bilingual program and what is doing?	1.6400	1.7308	1.6786	.7921

Group 1 = Students whose parents were actually visited and/or contacted personally by the Community Representative.
Group 2 = Students whose parents actually attended a group meeting and were contacted only by written notices.
Group 3 = Students whose parents were not contacted by the Community Representative.
Group 4 = Students randomly selected from Model I.
Group 5 = Students randomly selected from Model II.
Group 6 = Students randomly selected from Model III.

Figure 2-1. COMPARISON OF TREATMENT GROUP RESPONSES
(Page 2 Of 3)

Item	Mean Responses			Probability all groups are equal
	Group 1 and 4	Group 2 and 5	Group 3 and 6	
0= Incorrect 1= Correct				
1. What is _____'s teacher's name?	.9200	.8846	.9600	.3756
2. What is _____'s teacher aide's name?	.2600	.4808	.2800	.0321
3. What is _____'s principal's name?	.7800	.7885	.8000	.9712
1= Never 3= Sometimes 2= Seldom 4= Often				
4. Do you check to see if _____ has any homework and make sure that he/she does it?	3.6667	3.3830	3.7021	.1193
5. How often do you discuss _____'s school work with him/her?	3.6667	3.7059	3.6531	.9118
6. Do you discuss with other parents the things happenning at _____'s school?	2.3922	2.8600	2.3922	.0512
1= Just when asked 2= Whenever they want to				
7. How many times have you visited _____'s school since August,1975? - Mother	5.0811	6.7500	4.0286	.0997
8. How many times have you visited _____'s school since August,1975? - Father	1.6250	1.6500	1.6522	.9989
9. Do you think parents should visit their childrens school whenever they want to or just when asked to come by the principal, counselor, or teacher?	1.8654	1.9020	1.9608	.4859
1= Never 3= Most of the time 2= Sometimes 4= Always				
10. Do you discuss _____'s report card with him/her?	3.8125	3.4583	3.8125	.0124
11. Do you read the letters and notices sent home by _____'s school?	3.6077	3.8627	3.9020	.4343
1= No 2= Yes				
12. Do you think that letters and notices sent home by _____'s school should be in both English and Spanish?	1.9796	1.9608	1.9020	.1938
1= Not at all 3= Some 2= Very little 4= Very much				
13. How well do you feel you understand Bilingual Education?	3.0962	3.1176	3.1200	.9874
14. How much do you approve of Bilingual Education for _____?	3.8039	3.8077	3.8235	.9787
1= No 2= Yes				
15. Prior to today, has_____'s school informed you about the Bilingual program and what is doing?	1.7451	1.7143	1.7000	.8775

Group 1 = Students whose parents were actually visited and/or contacted personally by the Community Representative.
Group 2 = Students whose parents actually attended a group meeting and were contacted only by written notices.
Group 3 = Students whose parents were not contacted by the Community Representative.
Group 4 = Students randomly selected from Model I.
Group 5 = Students randomly selected from Model II.
Group 6 = Students randomly selected from Model III.

Figure 2-1. COMPARISON OF TREATMENT GROUP RESPONSES.
(Page 3 of 3)

ACTIVITY CATEGORY	NUMBER OF PARENTS Model 1	Model 2	Model 3	CHI SQUARE	p
Instructional	20	15	13	1.625	.4477
Material Preparation	20	22	13	2.436	.2958
Field Trips	25	30	23	1.000	.6126
Program Preparation	8	10	8	.308	.8580
Supervision	10	15	3	7.786	.0202
Parties	37	38	38	.018	.9918
Visitation	56	47	32	6.533	.0373
Conference	351	342	344	.129	.9371
Total Number of Visits	608	593	521	7.537	.0228

Figure 2-2. COMPARISON OF PARENT PARTICIPATION LEVELS AMONG MODEL 1, MODEL 2, AND MODEL 3.

ATTACHMENT 3

EXPERIENCE-BASED CURRICULUM
1976-1977

Figure 3 accurately describes the assignment of teaching teams to the three Experience-Based Curriculum (EBC) treatments. The three treatments compared are described below.

Full Treatment - Teachers were trained to use the experience-based instructional units developed by the ESEA Title VII Bilingual Project and students participated in field experiences prior to posttest date.

Partial Treatment - Teachers were not trained and units were not provided, but students did participate in field experiences prior to posttest date.

Delayed Treatment - Teachers were not trained, units were not provided, and students did not participate in field experiences prior to posttest date; however, all of the above were provided after the posttest date.

The ESEA Title VII staff developed six curriculum units to be used in the project classrooms in conjunction with field trips.

1. Nurseries (plants)
2. Circus
3. Trains
4. Banks
5. Printers
6. Airports

A regression analysis was conducted to determine if treatment was a significant predictor of students' scores on the domain-referenced Experience-Based Curriculum Test (EBCT), a vocabulary instrument based on the EBC. The starting model used was as follows.

$$\text{EBCT Posttest} = \text{EBCT Pretest} + \text{Treatment} + \text{Error}$$

Each reduced model was as follows.

$$\text{EBCT Posttest} = \text{EBCT Pretest} + \text{Error}$$

Two treatments were compared with each F test. Figure 3-1 summarizes the results obtained. Full treatment groups consistently outperformed both delayed and partial treatment groups. Partial treatment subjects outperformed delayed treatment subjects on level one of the EBCT.

Figure 3-2 is a set of graphs which provides the actual mean scores for the students tested plotted to show pre and post relationships.

Variable	Full Treatment vs Delayed Treatment			Full Treatment vs Partial Treatment			Partial Treatment vs Delayed Treatment		
	K-1	2-3	4-5	K-1	2-3	4-5	K-1	2-3	4-5
Spanish Items	F = 1.01 P = .3176 (Neither)	F = 10.74 P = .0015 (Full)	F = 14.75 P = .0003 (Full)	F = 2.19 P = .1355 (Neither)	F = 4.60 P = .0305 (Full)	F = 18.90 P = .0001 (Full)	F = 7.47 P = .0066 (Partial)	F = 1.69 P = .1913 (Neither)	F = 0.02 P = .8719 (Neither)
English Items	F = 92.51 P = .0000 (Full)	F = 2.42 P = .1163 (Neither)	F = 95.88 P = .0000 (Full)	F = 13.64 P = 0005 (Full)	F = 0.81 P = .3711 (Neither)	F = 113.36 P = .0000 (Full)	F = 32.37 P = .0000 (Partial)	F = 0.17 P = .6802 (Neither)	F = 0.17 P = .6829 (Neither)
Total Score	F = 32.59 P = .0000 (Full)	F = 10.35 P = .0018 (Full)	F = 60.92 P = .0000 (Full)	F = 0.64 P = .4293 (Neither)	F = 3.93 P = .0451 (Full)	F = 77.22 P = .0000 (Full)	F = 26.08 P = .0000 (Partial)	F = 1.09 P = .2982 (Neither)	F = 0.161 P = .6912 (Neither)

Treatment identified in parentheses had the higher predicted posttest scores when pretest scores were used as a covariable.

Figure 3-1. REGRESSION ANALYSES RESULTS - EXPERIENCE-BASED CURRICULUM TEST